

CLAIMS

1. A film scanner for reading an image formed on a film, said film scanner comprising:

an imaging device that senses a part of said image to generate

5 an image signal;

a transport table that supports said film;

a stepper motor that moves said transport table in a predetermined direction, so that said imaging device can sense the whole of said image, said stepper motor being driven in steps;

10 and

an image signal reading processor that reads said image signal in synchronization with movement of said transport table, said image signal reading processor reading at one or both of a first timing where said stepper motor stops at a rotational angle position of a step and a second timing where said stepper motor temporarily stops at least at one rotational angle position during a step.

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2. A film scanner according to claim 1, wherein said second timing is a temporary stopping at a rotational angle position of half of a step.

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3. A film scanner according to claim 1, wherein said image signal reading processor reads said image signal only at said first timing of said stepper motor at the time of a pre-scan of the film and reads said image signal at each of said first timing and said second timing at the time of a main-scan of the film.

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4. A film scanner according to claim 1, wherein said stepper motor is temporarily stopped at a point of time of overshoot caused when driven by said step and said second timing is the timing of the temporary stopping due to said overshoot.

5 5. A film scanner according to claim 4, wherein the rotational angle position of the state of temporary stopping of said stepper motor at the time of overshoot is a predetermined rotational angle position in the middle of said step.

6. A film scanner according to claim 1, wherein said transport
10 table is provided detachably with a film holder for holding said film, a position of said film holder to said transport table being changed to switch said image to be scanned.

7. A film scanner according to claim 1, further comprising a
15 rack provided at said transport table along said predetermined direction, and a pinion attached to an output shaft of said stepper motor to engage with said rack.

8. A film scanner according to claim 1, further comprising an
20 image signal rearranging processor rearranges said image signals read at said first and second timings in order, so that arranged image signals of the correct order are obtained.

9. A film scanner provided with an imaging device for performing
a main-scan of a film on which an image is formed to scan said
image and a scanning mechanism for moving the film in a sub-scan
direction perpendicular to said main-scan direction with respect
25 to said imaging device, characterized in that said scanning

mechanism is provided with a transport table for supporting said film and transporting it in said sub-scan direction, a transport mechanism for making said transport table move in said sub-scan direction, and an image signal reading processor for reading an
5 image signal of said film obtained by said imaging device in synchronization with movement of said transport table, said transport mechanism is provided with a stepper motor serving as a source of drive power and driven in required steps, and said image signal reading processor is configured to read said image
10 signal at one or both of a first timing where said stepper motor stops at a rotational angle position of a step and a second timing where it temporarily stops at least at one rotational angle position during a step.